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MIURA AKIRA**(54) **ZINC ALKALINE BATTERY**

(57) Abstract:

PURPOSE: To acquire a cell of decreased hydrogen gas generation and a good discharge property, by making the active substance of a negative electrode consisting of zinc contain lead, indium and the like which have a function to enhance a hydrogen overvoltage of zinc, in a specific extent, and, an alkaline metal such as lithium, also in a specific extent, and utilizing a synergism of them.

CONSTITUTION: A zinc alloy is used for an active substance of the negative electrode, containing one or more metals of 0.01@0.5wt% selected from lead, indium, thallium, cadmium, tin, bismuth, gallium, aluminum, silver, and tantal, and one or more alkaline metals of 0.00005@1.0wt% selected from lithium, sodium, potassium, rubidium, and cesium. In other words, an alkaline solution of mainly caustic potash or caustic soda is used as an electrolyte, the above mentioned zinc alloy or

amalgamated zinc alloy is used as a negative electrode active substance, and manganese dioxide, silver oxide, oxygen, etc. is used as a positive electrode active substance, to acquire a battery of a high discharge property.

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